UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY, AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SEPTEMBER 21, 2001

STATUS DB-LA

PTAS BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN ROBERT B. O'ROURKE 12400 WILSHIRE BOULEVARD, 7TH FLOO

LOS ANGELES, CA 90025

BLAKELY, SOKOLOFF, TAYLUR & ZAS

LOS ANGELES UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/16/2001

REEL/FRAME: 011982/0028

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BEACH, ROBERT S.

DOC DATE: 07/11/2001

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION NEW ORCHARD ROAD ARMONK, NEW YORK 10504

SERIAL NUMBER: 09827278

PATENT NUMBER:

FILING DATE: 04/04/2001

ISSUE DATE:

LAZENA MARTIN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS 550 9-1999-0038 USZ

07-20-2001

FORM PTO-1595 (Rev. 3/01) OMD NO. 0651-0011 exp. 5/31/2002)	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
	1784217
to the Honorable Commissioner of Patents and Trademarks.	Please record the attached original documents or copy thereof.
Name of conveying party(ies):	Name and address of receiving party(ies):
Robert S. Beach	Name: International Business Machines
	Corporation
Additional name(s) of conveying party(ies) attached? ■ No □Yes	Internal Address:
3. Nature of Conveyance	Street Address: New Orchard Road
Assignment Merger	
Security Agreement Change of Name	City: Armonk State/Province: New York Zip: 10504
Other:	Country: <u>U.S.A.</u>
Execution Data(s): <u>07/11/2001</u>	Additional name(s) & address(es) attached? ☐ Yes ■ No
 Application Number(s) or patent number(s): : If this document is being filed together with a new applicat 	ion, the execution date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
09/827,278 Additional numbers a	ttached? Tyes No ULD 7/16/01
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Robert B. O'Rourke	
Name: Blakely, Sokoloff, Taylor & Zafman LLP Internal Address:	7. Total Fee (37 CFR 3.41)\$40.00 ■ Enclosed
Street Address: 12400 Wilshire Boulevard, 7th Floor	Authorized to be charged to deposit account
City: Los Angeles State: California Zip: 90025	8. Deposit Account Number:
v	02-2666
·	(Attach duplicate copy of this page if paying by deposit account)
DO NOT US	SE THIS SPACE
9. Statement and signature. To the best of my knowledge and believe, the foregoing is true a document Robert B. O'Rourke, Reg. No. 46,972	and correct and any attached copy is a true copy of the original $7/(2/\theta)$
Name of Person Signing Sign	nature Date
	er sheet, attachments, and document: 2

Mail documents to be recorded with required cover sheet information to:
Assistant Commissioner of Patents, Box Assignments
Washington, D.C. 20231

Atty Docket No.03594P023X

07/20/2001 GTOH11 00000024 09827278 01 FC:581 40.00 OP

Whereas, I

INVENTOR AND CITY

(1) Robert S. Beach of Los Gatos County of Santa Clara and State of California

have invented certain improvements in

TITLE

SPIN VALVE SENSOR WITH AN ANTIFERROMAGNETIC LAYER BETWEEN TWO PINNED LAYERS

DATE THAT
INVENTOR
SIGNED THE
DECLARATION

and executed, respectively, a United States patent application therefor on $\frac{1}{2}$

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY

(1) at <u>San Jose, California</u>

DATE

on 7-11-01

INVENTOR SIGNATURE

Robert S. Beach

FIRST CLASS CERTIFICATE OF MAILING

n July 12, 20	mmissioner for Patents, Washington, D.C
7	ate of Deposit
Wie Ge Sh	nannon
Name of Person	Mailing Correspondence
$\langle \rangle$	
Janes Thannow	7-12:-01
// Signature	Date
V	Date
•	
	•
Client: IBM, Storage Systems Di Title: SPIN VALVE SENSOR WITH A	Filing/Issue Date: April 4, 2001 Lyision AN ANTIFERROMAGNETIC LAYER BETWEEN
TWO PINNED LAYERS	ANTIFERROMAGNETIC LAYER BETWEEN Atty/Secty Initials:JPW/ROR/js
Client: IBM, Storage Systems Discrete: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X Late Mailed: July 12, 2001	Atty/Secty Initials:
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X late Mailed: July 12, 2001 the following has been received in the U.S. P	Atty/Secty Initials: Docket Due Date: Attained Atter BETWEEN Atty/Secty Initials: Docket Due Date: Attained Atterior Atterior Attorney Attained Atterior Attorney Attorney Attorney Attorney Attained Attained Attorney A
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 he following has been received in the U.S. P	Atty/Secty Initials:
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X late Mailed: July 12, 2001 he following has been received in the U.S. Pl Amendment/Response (pgs.) (in triplicate)	Atty/Secty Initials:
lient: IBM, Storage Systems Ditiel: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. P Amendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract)	Atty/Secty Initials:
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. P Amendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.)	Atty/Secty Initials:
lient: IBM, Storage Systems Ditiel: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. P Amendment/Response (pgs.) Appel Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.)	Atty/Secty Initials:
lient: IBM, Storage Systems Dittle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. P Amendment/Response (pgs.) Appell Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.)	Atty/Secty Initials:
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 he following has been received in the U.S. Planendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.)	Atty/Secty Initials:
ient: IBM, Storage Systems Dittle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. Parendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.) Application - Design (pgs.)	Atty/Secty Initials:
ient: IBM, Storage Systems Ditte: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. Parendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.) Application - Design (pgs.) Application - Design (pgs.)	Atty/Secty Initials:
lient: IBM, Storage Systems Ditle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. P Amendment/Response (pgs.) Appell Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.) Application - Design (pgs.) Application - Design (pgs.)	Atty/Secty Initials:
tient: IBM, Storage Systems District SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 the following has been received in the U.S. Parendment/Response (pgs.) Appeal Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.) Application - Design (pgs.) Application - Provisional (pgs.) Application - Provisional (pgs.) Assignment and Cover Sheet	Atty/Secty Initials:
lient: IBM, Storage Systems Dititle: SPIN VALVE SENSOR WITH A TWO PINNED LAYERS STZ File No.: 03594P023X ate Mailed: July 12, 2001 The following has been received in the U.S. Parendment/Response (pgs.) Appell Brief (pgs.) (in triplicate) Application - Utility (pgs., with cover and abstract) Application - Rule 1.53(b) Continuation (pgs.) Application - Rule 1.53(b) Divisional (pgs.) Application - Rule 1.53(b) CIP (pgs.) Application - Rule 1.53(d) CPA Transmittal (pgs.) Application - Design (pgs.) Application - PCT (pgs.) Application - Provisional (pgs.)	Atty/Secty Initials: